CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

October 4, 2016

Mr. Roger Grimsley, City Manager
City of San Juan Bautista
PO Box 1420
San Juan Bautista, CA 95045

Dear Mr. Grimsley:

COMPLIANCE ORDER NO. 02_05_16R_004
VIOLATION OF CALIFORNIA HEALTH AND SAFETY CODE 116555(A)(3)
CITY OF SAN JUAN BAUTISTA, WATER SYSTEM NO. 3510002

Enclosed is a Compliance Order issued to the City of San Juan Bautista (City) Water System.

The City will be billed by the State Water Resources Control Board Division of Drinking Water (State Board) for the time spent on issuing this Compliance Order. Health and Safety Code Section 116577 provides that a public water system must reimburse the Division for actual costs incurred by the Division for specified enforcement actions, including, but not limited to, preparing, issuing and monitoring compliance associated with this violation. At this time, the state Board has spent approximately two hours on enforcement activities associated with this Compliance Order.

The City will receive a bill from the State Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the City of San Juan Bautista Water System for the current fiscal year.

If you have any questions regarding this matter, please contact me at (831) 655-6934.

Sincerely,

Jan R. Sweigert, P.E.
District Engineer, Monterey District Office
Northern California Field Operations Branch
Division of Drinking Water

Enclosure: Compliance Order No. 02_05_16R_004

Certified Mail No. 7008 1830 0004 5435 2640

cc (w/ enclosures):

San Benito County Environmental Health Department

Rick Edge, Mayor
City of San Juan Bautista
PO Box 1420
San Juan Bautista, CA 95045

STATE OF CALIFORNIA

WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

TO: CITY OF SAN JUAN BAUTISTA

ATTN: Mr. Roger Grimsley, City Manager
City of San Juan Bautista
P. O. Box 1420
San Juan Bautista, CA 95045

COMPLIANCE ORDER NO. 02_05_16R_004

FOR

VIOLATION OF CALIFORNIA HEALTH AND SAFETY CODE SECTION 116555(a)(3)

CITY OF SAN JUAN BAUTISTA WATER SYSTEM

WATER SYSTEM NO. 3510002

Issued on October 04, 2016

Section 116655 of the California Health and Safety Code (hereinafter "CHSC") authorizes the issuance of a compliance order to a public water system for violations or threatened violations of the California Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4, (commencing with Section 116270)) (hereinafter "California SDWA"), or any permit, regulation, or standard issued or adopted thereunder.

The State Water Resources Control Board (hereinafter "Board"), acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division

(hereinafter "Deputy Director"), hereby issues a compliance order (hereinafter "Order") to City of San Juan Bautista Water System (hereinafter "Water System"), for failure to comply with CHSC Section 116555 (a)(3).

A copy of the applicable statutes and regulations is included in Appendix 1, which is attached hereto and incorporated herein by this reference.

STATEMENT OF FACTS

The Water System is classified as a community water system which serves a population of approximately 1700 persons through 693 service connections. In addition, there is a significant tourist population served through the San Juan Bautista Mission/State Park and 15 restaurants. The Water System operates under Domestic Water Supply Permit No. 73-048, issued by the Division on December 31, 1973, and amended in 1978, 2004 and 2007 to reflect changes to the system facilities.

The source of supply for the Water System is three groundwater wells, two designated as "active" sources and one designated as "standby", and identified as shown in the table below.

Source	PS Code	Availability
Well 01 - Raw	3510002 - 001	Active
Well 02 - Raw	3510002 - 002	Active
Well 03 - Raw- Standby	3510002 - 003	Standby

The Water System currently has to operate both Wells 01 and 02 to meet the maximum day demand of its customers. Well 01 is unable to provide enough water to meet the maximum day demand for extended periods of time when operating as the sole source supplying the water system. Well 02 is susceptible to high nitrates exceeding the maximum contaminant level (MCL) for nitrate as N of 10 mg/L (milligrams per liter) when operated for an extended

period of time. Well 03, which is designated as a standby well, also has nitrate over the MCL requiring public notification at any time that it is in use.

The Water System chose to remove Well 02 from service and to rely solely on Well 01 to meet system demands in August 2013 after monitoring showed nitrates in Well 02 over the MCL. Well 01 could not provide adequate supply over an extended period of time, and the Water System had to bring Well 02 online on May 7, 2014 to avoid water outages. The Division required the Water System to provide public notification for nitrates over the MCL as a condition of using Well 02. Well 02 exceeded the nitrate MCL of 45 mg/L as NO3[1] for the period of May 7, 2014 thru May 12, 2014 with results between 83 and 95 mg/L. The Division issued Compliance Order 02-05-14R-001 to the Water System on May 30, 2014, which included a directive to implement a solution to the nitrate contamination issue by March 31, 2015. Citation 02-05-15R-007 was issued to the Water System on June 12, 2015 for non-compliance with Compliance Order 02-05-14R-001 and directed the Water System to make improvements by July 1, 2017 to ensure a reliable and adequate supply of water at all times that meets all primary drinking water standards.

The Division recently received two Initial Study/Mitigated Negative Declarations from the State Clearinghouse regarding proposed development projects in the City of San Juan Bautista: *Copperleaf Estates* (comprising 45 new single family homes); and the *Service Station, Convenience Store and Quick Serve Restaurant* Project. Both projects would add new connections to the Water System, increasing system demand.

[1] The California Code of Regulations Section 64431 previously specified that nitrate laboratory results should be reported as "Nitrate (as NO3)" with an MCL of 45 mg/L. The regulation was revised in 2015 to specify that nitrate laboratory results should be reported as "Nitrate (as nitrogen)". As a result, the MCL for nitrate is now expressed as "10 mg/L (as nitrogen)" instead of "45 mg/L (as NO3)". The revision only affected how the nitrate result is reported; the MCL has not changed and is not more stringent.

DETERMINATION

The Division has determined that the Water System is not able to provide a reliable and adequate supply of pure, wholesome, healthful, and potable water, in that the Water System would experience water quality or quantity problems if either of its two active wells was taken offline for an extended period. The Water System therefore has violated, and continues to violate, CHSC Section 116555 (a)(3).

DIRECTIVES

The Water System is hereby directed to take the following actions:

1. Effective immediately upon its receipt of this Order, the Water System shall not make any additional service connections to its water system, including any such service connections for which a "will serve" letter was issued at any time by the Water System, but for which a building permit was not issued prior to the date of this Order. As used in this Order, "will serve" letter means any form of notice, representation or agreement that the Water System will supply water to a property, parcel or structure. This Directive shall remain in place until the Water System has done the following:
    (a) Provide additional source capacity to meet the projected Maximum Day Demand including anticipated development
    (b) Submit documentation to the Division showing that the water quality of the new source(s) complies with all state and federal maximum contaminant levels
    (c) Submit to the Division and receive approval from the Division of a Source Capacity Planning Study pursuant to Title 22, CCR Section 64558, that demonstrates adequate source capacity as described in Title 22, CCR Section 64554
    (d) Receive from the Division an amended domestic water supply permit approving the new source(s)

The Division reserves the right to make such modifications to this Order as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Order and shall be deemed effective upon issuance.

Nothing in this Order relieves the Water System of its obligation to meet the requirements of the California SDWA, or any regulation, permit, standard or order issued or adopted thereunder.

All submittals required by this Order shall be submitted to the Division at the following address:

Jan Sweigert, P.E.
Monterey District Engineer
State Water Resources Control Board, Division of Drinking Water
1 Lower Ragsdale, Bldg. 1, Suite 120
Monterey, CA, 93940

PARTIES BOUND

This Order shall apply to and be binding upon the Water System, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The Directives of this Order are severable, and the Water System shall comply with each and every provision thereof, notwithstanding the effectiveness of any provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the Board to: issue a citation with assessment of administrative penalties to a public water system for violation or continued violation of the

requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the Board; and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the Board. The Board does not waive any further enforcement action by issuance of this compliance order.

Oct. 4, 2016

Stefan Cajina, P.E., Chief
North Coastal Section
State Water Resources Control Board
Division of Drinking Water

Date

Appendix: 1. Applicable Statutes and Regulations

Certified Mail No. 7008-1830-0004-5435-2640

APPENDIX 1. APPLICABLE STATUTES AND REGULATIONS
For Compliance Order No. 02_05_16R_004

NOTE: The following language is provided for the convenience of the recipient, and cannot be relied upon as the State of California's representation of the law. The published codes are the only official representation of the law. Regulations related to drinking water are in Titles 22 and 17 of the California Code of Regulations. Statutes related to drinking water are in the Health & Safety Code, the Water Code, and other codes.

California Health and Safety Code (CHSC):

Section 116271 (Transition of CDPH duties to State Board) states in relevant part:
(a) The State Water Resources Control Board succeeds to and is vested with all of the authority, duties, powers, purposes, functions, responsibilities, and jurisdiction of the State Department of Public Health, its predecessors, and its director for purposes of all of the following:

(1) The Environmental Laboratory Accreditation Act (Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101).
(2) Article 3 (commencing with Section 106875) of Chapter 4 of Part 1.
(3) Article 1 (commencing with Section 115825) of Chapter 5 of Part 10.
(4) This chapter and the Safe Drinking Water State Revolving Fund Law of 1997 (Chapter 4.5 (commencing with Section 116760)).
(5) Article 2 (commencing with Section 116800), Article 3 (commencing with Section 116825), and Article 4 (commencing with Section 116875) of Chapter 5.
(6) Chapter 7 (commencing with Section 116975).
(7) The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Division 43 (commencing with Section 75001) of the Public Resources Code).
(8) The Water Recycling Law (Chapter 7 (commencing with Section 13500) of Division 7 of the Water Code).
(9) Chapter 7.3 (commencing with Section 13560) of Division 7 of the Water Code.
(10) The California Safe Drinking Water Bond Law of 1976 (Chapter 10.5 (commencing with Section 13850) of Division 7 of the Water Code).
(11) Wholesale Regional Water System Security and Reliability Act (Division 20.5 (commencing with Section 73500) of the Water Code).
(12) Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Division 26.5 (commencing with Section 79500) of the Water Code).

(b) The State Water Resources Control Board shall maintain a drinking water program and carry out the duties, responsibilities, and functions described in this section. Statutory reference to "department," "state department," or "director" regarding a function transferred to the State Water Resources Control Board shall refer to the State Water Resources Control Board. This section does not impair the authority of a local health officer to enforce this chapter or a county's election not to enforce this chapter, as provided in Section 116500

(k)

(1) The State Water Resources Control Board shall appoint a deputy director who reports to the executive director to oversee the issuance and enforcement of public water system permits and other duties as appropriate. The deputy director shall have public health expertise.
(2) The deputy director is delegated the State Water Resources Control Board's authority to provide notice, approve notice content, approve emergency notification plans, and take other action pursuant to Article 5 (commencing with Section 116450), to issue, renew, reissue, revise, amend, or deny any public water system permits pursuant to Article 7 (commencing with Section 116525), to suspend or revoke any public water system permit pursuant to Article 8 (commencing with Section 116625), and to issue citations, assess penalties, or issue orders pursuant to Article 9 (commencing with Section 116650). Decisions and actions of the deputy director taken pursuant to Article 5 (commencing with Section 116450) or Article 7 (commencing with Section 116525) are deemed decisions and actions taken, but are not subject to reconsideration, by the State Water Resources Control Board. Decisions and actions of the deputy director taken pursuant to Article 8 (commencing with Section 116625) and Article 9 (commencing with Section 116650) are deemed decisions and actions taken by the State Water Resources Control Board, but any aggrieved person may petition the State Water Resources Control Board for reconsideration of the decision or action. This subdivision is not a limitation on the State Water Resources Control Board's authority to delegate any other powers and duties.

Section 116555 (Operational Requirements) states in relevant part:

(a) Any person who owns a public water system shall ensure that the system does all of the following:
(1) Complies with primary and secondary drinking water standards.
(2) Will not be subject to backflow under normal operating conditions.
(3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.

Section 116655 (Orders) states:
(a) Whenever the state board determines that any person has violated or is violating this chapter, or any order, permit, regulation, or standard issued or adopted pursuant to this chapter, the state board may issue an order doing any of the following:
(1) Directing compliance forthwith.
(2) Directing compliance in accordance with a time schedule set by the state board.
(3) Directing that appropriate preventive action be taken in the case of a threatened violation.
(b) An order issued pursuant to this section may include, but shall not be limited to, any or all of the following requirements:
(1) That the existing plant, works, or system be repaired, altered, or added to.
(2) That purification or treatment works be installed.
(3) That the source of the water supply be changed.
(4) That no additional service connection be made to the system.
(5) That the water supply, the plant, or the system be monitored.
(6) That a report on the condition and operation of the plant, works, system, or water supply be submitted to the state board.

California Code of Regulations, Title 22 (CCR):

Section 64554 (New and Existing Source Capacity) states:
(a) At all times, a public water system's water source(s) shall have the capacity to meet the system's maximum day demand (MDD). MDD shall be determined pursuant to subsection (b).
(1) For systems with 1,000 or more service connections, the system shall be able to meet four hours of peak hourly demand (PHD) with source capacity, storage capacity, and/or emergency source connections.
(2) For systems with less than 1,000 service connections, the system shall have storage capacity equal to or greater than MDD, unless the system can demonstrate that it has an additional source of supply or has an emergency source connection that can meet the MDD requirement.
(3) Both the MDD and PHD requirements shall be met in the system as a whole and in each individual pressure zone.

(b) A system shall estimate MDD and PHD for the water system as a whole (total source capacity and number of service connections) and for each pressure zone within the system (total water supply available from the water sources and interzonal transfers directly supplying the zone and number of service connections within the zone), as follows:
(1) If daily water usage data are available, identify the day with the highest usage during the past ten years to obtain MDD; determine the average hourly flow during MDD and multiply by a peaking factor of at least 1.5 to obtain the PHD.
(2) If no daily water usage data are available and monthly water usage data are available:
(A) Identify the month with the highest water usage (maximum month) during at least the most recent ten years of operation or, if the system has been operating for less than ten years, during its period of operation;
(B) To calculate average daily usage during maximum month, divide the total water usage during the maximum month by the number of days in that month; and
(C) To calculate the MDD, multiply the average daily usage by a peaking factor that is a minimum of 1.5; and
(D) To calculate the PHD, determine the average hourly flow during MDD and multiply by a peaking factor that is a minimum of 1.5.
(3) If only annual water usage data are available:
(A) Identify the year with the highest water usage during at least the most recent ten years of operation or, if the system has been operating for less than ten years, during its years of operation;
(B) To calculate the average daily use, divide the total annual water usage for the year with the highest use by 365 days; and
(C) To calculate the MDD, multiply the average daily usage by a peaking factor of 2.25.
(D) To calculate the PHD, determine the average hourly flow during MDD and multiply by a peaking factor that is a minimum of 1.5.
(4) If no water usage data are available, utilize records from a system that is similar in size, elevation, climate, demography, residential property size, and metering to determine the average water usage per service connection. From the average water usage per service connection, calculate the average daily demand and follow the steps in paragraph (3) to calculate the MDD and PHD.

(c) Community water systems using only groundwater shall have a minimum of two approved sources before being granted an initial permit. The system shall be capable of meeting MDD with the highest-capacity source off line.

(d) A public water system shall determine the total capacity of its groundwater sources by summing the capacity of its individual active sources. If a source is influenced by concurrent operation of another source, the total capacity shall be reduced to account for such influence. Where the capacity of a source varies seasonally, it shall be determined at the time of MDD.

(e) The capacity of a well shall be determined from pumping data existing prior to March 9, 2008, or in accordance with subsection (f) or (g). Prior to conducting a well capacity test pursuant to subsection (g), a system shall submit the information listed below to the State Board for review and approval. For well capacity tests conducted pursuant to subsection (f), the information shall be submitted to the State Board if requested by the State Board.

(1) The name and qualifications of the person who will be conducting the test;

(2) The proposed test's pump discharge rate, based on the design rate determined during well development and/or a step-drawdown test.

(3) A copy of a United States Geological Survey 7 ½-minute topographic map of the site at a scale of 1:24,000 or larger (1 inch equals 2,000 feet or 1 inch equals less than 2,000 feet) or, if necessary, a site sketch at a scale providing more detail, that clearly indicates;

(A) The well discharge location(s) during the test, and

(B) The location of surface waters, water staff gauges, and other production wells within a radius of 1000 feet;

(4) A well construction drawing, geologic log, and electric log, if available;

(5) Dates of well completion and well development, if known;

(6) Specifications for the pump that will be used for the test and the depth at which it will draw water from the well;

(7) A description of the methods and equipment that will be used to measure and maintain a constant pumping rate;

(8) A description of the water level measurement method and measurement schedule;

(9) For wells located in or having an influence on the aquifer from which the new well will draw water, a description of the wells' operating schedules and the estimated amount of groundwater to be extracted, while the new well is tested and during normal operations prior to and after the new well is in operation;

(10) A description of the surface waters, water staff gauges, and production wells shown in (3)(B);

(11) A description of how the well discharge will be managed to ensure the discharge doesn't interfere with the test;

(12) A description of how the initial volume of water in the well's casing, or bore hole if there is no casing at the time, will be addressed to ensure it has no impact on the test results; and

(13) A written description of the aquifer's annual recharge.

(f) To determine the capacity of a well drilled in alluvial soils when there is no existing data to determine the capacity, a water system shall complete a constant discharge (pumping rate) well capacity test and determine the capacity as follows:

(1) Take an initial water level measurement (static water level) and then pump the well continuously for a minimum of eight hours, maintaining the pump discharge rate proposed in subsection (e)(2);

(2) While pumping the well, take measurements of the water level drawdown and pump discharge rates for a minimum of eight hours at a frequency no less than every hour;

(3) Plot the drawdown data versus the time data on semi-logarithmic graph paper, with the time intervals on the horizontal logarithm axis and the drawdown data on the vertical axis;

(4) Steady-state is indicated if the last four hours of drawdown measurements and the elapsed time yield a straight line in the plot developed pursuant to subsection (3). If steady-state is not achieved, the pump discharge rate shall be continued for a longer period of time or adjusted, with paragraphs (2) and (3) above repeated, until steady-state is achieved.

(5) Discontinue pumping and take measurements of the water level drawdown no less frequently than every 15 minutes for the first two hours and every hour thereafter for at least six hours or until the test is complete; and

(6) To complete the test, the well shall demonstrate that, within a length of time not exceeding the duration of the pumping time of the well capacity test, the water level has recovered to within two feet of the static water level measured at the beginning of the test or to a minimum of ninety-five percent of the total drawdown measured during the test, whichever is more stringent.

(7) The capacity of the well shall be the pump discharge rate determined by a completed test.

(g) The capacity of a well whose primary production is from a bedrock formation, such that the water produced is yielded by secondary permeability features (e.g., fractures or cracks), shall be determined pursuant to either paragraph (1) or (2) below.

(1) The public water system shall submit a report, for State Board review and approval, proposing a well capacity based on well tests and the evaluation and management of the aquifer from which the well draws water. The report shall be prepared and signed by a California registered geologist with at least three years of experience with groundwater hydrology, a California licensed engineer with at least five years of experience with groundwater hydrology, or a California certified hydrogeologist. Acceptance of the proposed well capacity by the State Board shall, at a minimum, be based on the State Board's review and approval of the following information presented in the report in support of the proposed well capacity:

(A) The rationale for the selected well test method and the results;

(B) The geological environment of the well;
(C) The historical use of the aquifer;
(D) Data from monitoring of other local wells;
(E) A description of the health risks of contaminants identified in a Source Water Assessment, as defined in section 63000.84 of Title 22, and the likelihood of such contaminants being present in the well's discharge;
(F) Impacts on the quantity and quality of the groundwater;
(G) How adjustments were made to the estimated capacity based on drawdown, length of the well test, results of the wells test, discharge options, and seasonal variations and expected use of the well; and
(H) The well test(s) results and capacity analysis.

(2) During the months of August, September, or October, conduct either a 72-hour well capacity test or a 10-day well capacity test, and determine the well capacity using the following procedures:

(A) Procedures for a 72 hour well capacity test:

1. For the purpose of obtaining an accurate static water level value, at least twelve hours before initiating step 2., pump the well at the pump discharge rate proposed in subsection (e)(2) for no more than two hours, then discontinue pumping;
2. Measure and record the static water level and then pump the well continuously for a minimum of 72 hours starting at the pump discharge rate proposed in (e)(2);
3. Measure and record water drawdown levels and pump discharge rate:
   a. Every thirty minutes during the first four hours of pumping,
   b. Every hour for the next four hours, and
   c. Every four hours thereafter until the water drawdown level is constant for at least the last four remaining measurements, and;
4. Plot the drawdown and pump discharge rate data versus time data on semi-logarithmic graph paper, with the time intervals on the horizontal logarithmic axis and the drawdown and pump discharge rate data on the vertical axis.

(B) Procedures for a 10 day well capacity test:

1. For the purpose of obtaining an accurate static water level value, at least twelve hours before initiating step 2., pump the well at the pump discharge rate proposed in subsection (e)(2) for no more than two hours, then discontinue pumping;
2. Measure and record the static water level and then pump the well continuously for a minimum of 10 days starting at the pump discharge rate proposed in (e)(2);
3. Measure and record water drawdown levels and pumping rate:
   a. Every thirty minutes during the first four hours of pumping,
   b. Every hour for the next four hours,
   c. Every eight hours for the remainder of the first four days,
   d. Every 24 hours for the next five days, and
   e. Every four hours thereafter until the water drawdown level is constant for at least the last four remaining measurements, and;
4. Plot the drawdown and pump discharge rate data versus time data on semi-logarithmic graph paper, with the time intervals on the horizontal logarithmic axis and the drawdown and pump discharge rate data on the vertical axis.

(C) To complete either the 72-hour or 10-day well capacity test the well shall demonstrate that, within a length of time not exceeding the duration of the pumping time of the well capacity test, the water level has recovered to within two feet of the static water level measured at the beginning of the well capacity test or to a minimum of ninety-five percent of the total drawdown measured during the test, whichever is more stringent. If the well recovery does not meet these criteria, the well capacity cannot be determined pursuant to subsection (g)(2) using the proposed pump rate. To demonstrate meeting the recovery criteria, the following water level data in the well shall be measured, recorded, and compared with the criteria:

1. Every 30 minutes during the first four hours after pumping stops,
2. Hourly for the next eight hours, and
3. Every 12 hours until either the water level in the well recovers to within two feet of the static water level measured at the beginning of the well capacity test or to a at least ninety-five percent of the total drawdown measured during the test, which ever occurs first.

(D) Following completion of a 72-hour or 10-day well capacity test, the well shall be assigned a capacity no more than:

1. For a 72-hour test, 25 percent of the pumping rate at the end of a completed test's pumping.
2. For a 10-day test, 50 percent of the pumping rate at the end a completed test's pumping.

(h) The public water system shall submit a report to the State Board that includes all data and observations associated with a well capacity test conducted pursuant to subsection (f) or (g), as well as the estimated capacity determination methods and calculations. The data collected during pumping and recovery phases of the well capacity tests shall be submitted in an electronic spreadsheet format in both tabular and graphic files.

(i) An assigned well capacity may be revised by the State Board if pumping data collected during normal operations indicates that the assigned well capacity was not representative of the actual well capacity.

(j) If directed by the State Board to do so, based on adverse conditions that may lead or may have led to a regional aquifer's inability to meet a water system's demand on such an aquifer, the water system shall submit a report to the State Board that includes regional aquifer recharge estimates and a water balance analysis. The report shall be prepared and signed by a California registered geologist with at least three years of experience with groundwater hydrology, a California licensed engineer with at least five years of experience with groundwater hydrology, or a California certified hydrogeologist.

(k) The source capacity of a surface water supply or a spring shall be the lowest anticipated daily yield based on adequately supported and documented data.

(l) The source capacity of a purchased water connection between two public water systems shall be included in the total source capacity of the purchaser if the purchaser has sufficient storage or standby source capacity to meet user requirements during reasonable foreseeable shutdowns by the supplier.

Section 64558 (Source Capacity Planning Study) states:

(a) If directed by the State Board to do so based on its determination that there is an existing or potential problem with the system's source capacity or a proposed expansion pursuant to section 64556(a)(5), a water system shall submit a Source Capacity Planning Study (Study) containing the following information:

(1) The anticipated growth of the water system over a projected period of at least ten years in terms of the population and number and type of residential, commercial, and industrial service connections to be served by the water system.

(2) Estimates of the amount of water needed to meet the total annual demand and the MDD over the projected ten-year growth period (projected system demand). Methods, assumptions, and calculations used to estimate the projected system demand shall be included.

(3) A map and description of the entire existing and proposed service area, showing:

(A) The location of each water source, including wells that are abandoned, out-of-service, destroyed, standby, or inactive;

1. Any valid water rights owned by the system for surface water sources, including information on any limitations or restrictions of those rights;
2. For a groundwater aquifer, the groundwater levels and drawdown patterns;
3. Permits or approvals for groundwater extraction if pumping from an adjudicated groundwater basin;
4. Existing and planned source pumping capability and distribution storage capacity for the system as a whole and for each pressure zone;
5. The calculated sustained well yields of existing wells if groundwater sources are used;
6. Permits, if required, for any waters proposed for use to offset potable water demand; and
7. A Source Water Assessment for each potable water source.

(B) Distribution system piping, pressure zones, hydropneumatic tanks, and reservoirs;

(C) Valves, sample taps, flow meters, unmetered service connections, and other system appurtenances;

(D) Conveyance facilities;

(E) Any flood plains in the projected service area; and

(F) The 100 year flood or highest recorded flood level, whichever is higher.

(b) If directed by the State Board to do so based on its determination that a study is out of date, a water system shall update and submit the Study to the State Board.

(c) Water systems that have submitted an Urban Water Management Plan to the Department[2] of Water Resources pursuant to Water Code Part 2.6 commencing with section 10610, may submit a copy of that report in lieu of some or all of the requirements of subsection (a) to the extent such information is included in the plan.

[2] Official text erroneously refers to "State Board of Water Resources", which will be corrected as noted at a later date.